WHAT IS CLAIMED IS:

1. A sub-band decomposition diversity reception method comprising:

determining a frequency correlation bandwidth in accordance with reception level frequency distribution.

2. A sub-band decomposition diversity reception method comprising:

determining reception level frequency distribution; and

determining a frequency correlation bandwidth in accordance with intervals between peaks and/or between dips in the reception level frequency distribution.

3. A sub-band decomposition diversity reception method comprising:

determining reception level frequency distribution; and

determining a frequency correlation bandwidth in accordance with intervals between intersections where a reception level intersects a threshold in the reception level frequency distribution.

4. A diversity reception method comprising:

receiving a multi-carrier system-based signal;

dividing a frequency region into sub-bands in accordance with a frequency correlation bandwidth;

comparing reception levels at antennas with each other for each of the sub-bands;

selecting one of the antennas, which has a greater reception level than the other reception levels; and

practicing diversity,

wherein a training mode period is provided at time of reception start to determine the frequency correlation bandwidth, and

wherein the signal is received after the training mode period in accordance with the frequency correlation bandwidth determined during the training mode period.

5. A diversity reception method as defined in claim 4, wherein the frequency

correlation bandwidth is determined in accordance with reception level frequency distribution.

6. A diversity reception method as defined in claim 4, wherein the frequency correlation bandwidth is a frequency width having a 0.5 or greater frequency correlation coefficient.

7. A diversity reception method as defined in claim 4, wherein the frequency correlation bandwidth is determined in accordance with intervals between peaks and/or between dips in reception level frequency distribution.

8. A diversity reception method as defined in claim 4, wherein the frequency correlation bandwidth is a half of each interval between peaks and/or between dips in reception level frequency distribution.

9. A diversity reception method as defined in claim 4, wherein the frequency correlation bandwidth is determined in accordance with intervals between intersections where reception level frequency distribution intersects a reception level threshold.

10. A diversity reception method as defined in claim 4, wherein the frequency correlation bandwidth is one of average and mean values of intervals between intersections where reception level frequency distribution intersects a reception level threshold.

11. A diversity reception method as defined in claim 9, wherein the threshold is determined in accordance with a combination of one element or two or greater elements selected from among reception level average, mean, maximum, and minimum values of all sub-carriers that form the signal.

12. A diversity receiver comprising:

several antennas;

a time-frequency transforming unit operable to transform information of a signal received by each of said antennas into a frequency region;

a level-detecting unit operable to detect a reception level of each of said

antennas;

a frequency correlation bandwidth-calculating unit operable to determine a frequency correlation bandwidth in accordance with information that derives from the reception level detected by said level-detecting unit;

a sub-band decomposition-calculating unit operable to determine a sub-band decomposition bandwidth in accordance with the frequency correlation bandwidth determined by said frequency correlation bandwidth-calculating unit, and operable to divide the frequency region into sub-bands;

a reception level-comparing unit operable to compare the reception levels detected by said level-detecting units with each other for each of the sub-bands; and

a selecting unit operable to select one of said antennas, which has a greater reception level than the other reception levels, in accordance with results from the comparison made by said reception level-comparing unit.

13.   A diversity receiver as defined in claim 12, further comprising:

an interval-calculating unit operable to calculate intervals between peaks and/or between dips in reception level frequency distribution,

wherein said frequency correlation bandwidth-calculating unit determines the frequency correlation bandwidth in accordance with the intervals calculated by said interval-calculating unit.

14.   A diversity receiver as defined in claim 12, further comprising:

a threshold-comparing unit operable to calculate intervals between intersections where reception level frequency distribution intersects a reception level threshold,

wherein said frequency correlation bandwidth-calculating unit determines the frequency correlation bandwidth in accordance with the intervals calculated by said threshold-comparing unit.

15. A diversity receiver as defined in claim 14, wherein the threshold is

determined in accordance with a combination of one element or two or greater elements selected from among reception level average, mean, maximum, and minimum values of all sub-carriers that form the signal.